

Corrections

Modeling Mitochondrial ROS: A Great Balancing Act. Saucerman, J. J. 2013. *Biophys. J.* 105(6): 1287–1288.

Page 1287 of the original article stated,

“Superoxide can be quite damaging because it has an extremely high affinity for electrons, ripping them away from nearby proteins, lipids and nucleic acids via oxidation.”

This statement is inaccurate. While there are multiple proposed mechanisms of superoxide toxicity, superoxide itself is not highly oxidative.

The following statement is more accurate:

Superoxide primarily exerts oxidative damage by being a reactant for hydrogen peroxide formation (spontaneous or catalyzed by superoxide dismutase) or peroxynitrite formation (when superoxide combines with nitric oxide).

<http://dx.doi.org/10.1016/j.bpj.2013.10.023>

Physical origin of the contact frequency in chromosome conformation capture data. Seungsoo Hahn and Dongsup Kim. *Biophysical J.* 105(8): 1786–1795

Equation (8) shown on page 1788 in the 105/8 issue of the Biophysical Journal as below:

$$F(n) = c_1 n^{2v} - c_2 n^{2v+1} + c_3 (1 - e^{-\xi n})$$

$$\text{with } c_1 = \frac{2k_1 b^2 + 2k_1 \alpha / \xi}{\xi}, \quad c_2 = \frac{k_1 \alpha}{\xi}, \quad \text{and } c_3 = \frac{k_1 c}{\xi}. \quad (8)$$

is incorrect, and should read

$$F(n) = c_1 n^{2v} - c_2 n^{2v+1} + c_3 (1 - e^{-\xi n})$$

$$\text{with } c_1 = \frac{2k_1 b^2 + 2k_1 \alpha / \xi}{\xi}, \quad c_2 = \frac{k_1 \alpha}{\xi}, \quad \text{and } c_3 = \frac{k_1 c}{\xi}. \quad (8)$$

Equation(11) shown on page 1788 as below:

$$\overline{C}(g; s_i, s_k) = \frac{\left[F\left(g - \left(n_i - \frac{n_k}{2}\right)\right) + F\left(g + \left(n_i - \frac{n_k}{2}\right)\right) - F\left(g - \left(n_i + \frac{n_k}{2}\right)\right) - F\left(g + \left(n_i + \frac{n_k}{2}\right)\right) \right]}{2} \quad (11)$$

is incorrect, and should be changed into

$$C(n_j; s_i, s_k) = \frac{F(n_i + n_j) + F(n_j + n_k) - F(n_j) - F(n_i + n_j + n_k)}{2} \quad (11)$$

<http://dx.doi.org/10.1016/j.bpj.2013.11.001>